

Drawings

Applicant encloses herewith a complete replacement set of formal drawings, Figures 1-12 on six pages, for the above-referenced matter as required.

REMARKS

1. Objection to the Drawings

In the Office action the drawings were objected to as allegedly being hand drawn. Applicant has submitted herewith formalized drawings. These drawings are believed to comport with the practices and procedures of the United States patent and Trademark Office.

2. Claim Objections

In the Office action certain claims were objected to due to the wording of the same. The suggested amendments have been made. Applicant contends that the objection to the claims have been overcome by these amendments, none of which were necessitated to overcome material information, prior art or otherwise.

3. 35 USC section 112, second paragraph

In the Office action specified claims were rejected as allegedly being indefinite. Appropriate amendments have been made and the claims are believed to comport with the provisions of 35 USC section 112. None of these amendments were necessitated to overcome material information, prior art or otherwise.

4. 35 USC section 103(a) ObviousnessA. Amended Claim 1.

In the Office action, the pending claims were rejected over Koren et al. in view of Mears et al. It was admitted in the Office action that Koren et al. disclose associating each of a plurality of subsystems with a holographic transform function. Mears et al., on the other hand was cited for teaching this and other limitations. However, Applicant has amended claim 1 to define a method that includes, inter alia, associating each of

the plurality of subsystems with a plurality of holographic transform functions so that any one of the plurality of sources may be selectively placed in data communication to any one of the plurality of optical detectors in response to the addressing information without the remaining detectors of the plurality of optical detectors being placed in data communication with the any one of the plurality of sources. This is opposite to the system advocated by Mears et al.

Mears et al. teaches that the holographic transform functions to facilitate data communication of an optical source with only one of the detectors of the switch. This is observed in column 5, lines 26-42. Specifically, The lens 7, hologram H1 and transform lens are tuned with respect to distance F to ensure that B1 arrives at B3 vis-à-vis hologram H3 and plane mirror 10. Mears et al. further teaches that B2 is destined for B5 by properly establishing the parameters of holograms H2 and H5, based upon the characteristics of lenses 7 and 9 and the distance L. As a result, Mears et al. teaches that each of the sources may be placed in data communication with only one other source/detector through hologram functions. This is opposite to Applicant's claimed method. Therefore, Applicant respectfully contends that a prima facie case of obviousness is not present with respect to amended claim 1.

B. Amended Claims 8 and 14

Each of amended claim 8 defines a switching device that includes an optical switching element having, *inter alia*, a plurality of sources of optical energy and a plurality of optical detectors, and a plurality of holographic transform functions, configured to allow any one of the plurality of sources to be selectively placed in data communication to any one of the plurality of optical detectors without the remaining

detectors of the plurality of optical detectors being in data communication with the any one of the plurality of sources. Claim 14 defines these features in terms of means-plus-function language. Applicants respectfully contend that a prima facie case of obviousness is not present with respect to amended claims 8 and 14, as Mears et al. teaches away from these feature for the reasons mentioned above with respect to amended claim 1.

5. The Dependent Claims

Considering that the dependent claims include all of the limitations of the independent claims from which they depend, the dependent claims are patentable to the extent that the independent claims are patentable. Therefore, Applicant respectfully contends that the dependent claims define an invention suitable for patent protection.

Applicant respectfully requests reconsideration and further examination of the application in view of the amendments and remarks set forth herein. A notice of allowance is earnestly solicited.

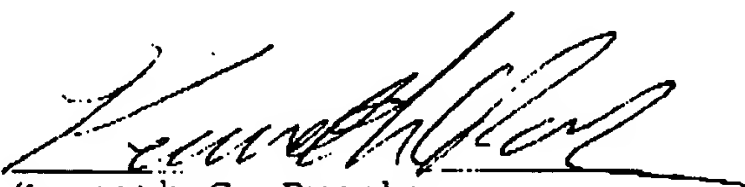
CERTIFICATE OF TRANSMISSION

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being transmitted via facsimile to the United States Patent and Trademark Office Group Art Unit 2633 at no. 703 872-2306.

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Respectfully Submitted,
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